Amendments to the Claims:

Please cancel claims 1 to 16 as presented in the underlying International Application No. PCT/EP2004/005603.

Please add new claims 17 to 31 as indicated in the listing of claims below.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 to 16 (canceled).

Claim 17 (new): A machine comprising:

a device for automatically detecting at least one fluorescing and/or light-absorbing indicator contained in a liquid service fluid during a process of filling the service fluid into the machine, the device including a filler tube for the service fluid, the service fluid to be poured in reaching a service fluid supply of the machine through the filler tube, a measurement section made of a translucent material, the measurement section at least partially filled with or traversed by a flow of the service fluid when filling the service fluid into the filler tube, the device further including at least one light source radiating onto the measurement section and an opto-receiver onto which the light impinges, the light being transmitted through the service fluid when the service fluid flows through the measurement section and/or emanating from the indicator due to a fluorescent effect, and which generates at least one measurement signal as a function of an intensity of the light impinging on the opto-receiver, the device including an evaluation unit evaluating at least one measurement signal of the opto-receiver.

Claim 18 (new): The machine as recited in claim 17 wherein the opto-receiver has at least two light sensors whose frequency regions are distinct from one another, and which each generate one measurement signal.

Claim 19 (new): The machine as recited in claim 17 wherein the light source and the opto-receiver are oriented to the measurement section and are positioned around the same at an angle of 0° to 170°.

Claim 20 (new): The machine as recited in claim 17 wherein, in a direction of flow upstream of the measurement section, the filler tube has a reduced cross-sectional area in the section leading into the measurement section.

Claim 21 (new): The machine as recited in claim 17 wherein the measurement section includes a measuring tube leading directly or indirectly into the service fluid supply of the machine.

Claim 22 (new): The machine as recited in claim 17 wherein a plurality of light sources are provided, which radiate in frequency regions that are distinct from one another.

Claim 23 (new): The machine as recited in claim 22 wherein the light sources are constituted of LEDs and/or of laser diodes having different wavelengths.

Claim 24 (new): The machine as recited in claim 17 wherein the filler tube leads into the measurement section.

Claim 25 (new): The machine as recited in claim 17 wherein the machine is an engine of a vehicle.

Claim 26 (new): The machine as recited in claim 17 wherein the service fluid is lubricating oil, engine oil or hydraulic oil.

Claim 27 (new): A method for automatically detecting at least one fluorescing and/or light-absorbing indicator contained in a liquid service fluid during the process of filling the service fluid into a machine through a device integrated in the machine, the method comprising the following steps:

filling the liquid service fluid to be detected into a filler tube, through which the service fluid arrives in the service fluid supply of the machine, and the liquid service fluid at least partially filling or flowing through a measurement section;

irradiating the liquid service fluid in the measurement section by at least one light source;

intercepting the light transmitted through the service fluid in the measurement section and/or emanating from the indicator contained in the same due to a fluorescent effect, by an opto-receiver, an intensity of the light being influenced by the at least one indicator or the concentration thereof;

generating at least one measurement signal indicative of the intensity of the light impinging on the opto-receiver; and

evaluating the at least one measurement signal in an evaluation unit and comparing the measurement signal to stored values.

Claim 28 (new): The method as recited in claim 27 wherein the at least one indicator is a fluorescing dye which is excited by the light source in the measurement section to a fluorescent radiation; and the fluorescent radiation constitutes at least one portion of the light intercepted by the opto-receiver.

Claim 29 (new): The method as recited in claim 27 wherein the service fluid contains at least two indicators that are active in different frequency regions; and the indicators are detected by at least two sensors of the opto-receiver that are sensitive in the different frequency regions.

Claim 30 (new): The method as recited in claim 29 wherein concentrations of the indicators.

Claim 31 (new): The method as recited in claim 27 wherein the measurement signal generated by the opto-receiver correlates with a concentration of the at least one indicator in the service fluid.

Claim 32 (new): The method as recited in claim 27 wherein one of the indicators of the service fluid forms a reference indicator on whose basis the opto-receiver generates a reference signal.

Claim 33 (new): The method as recited in claim 32 wherein the evaluation unit evaluates the at least one measurement signal on the basis of a ratio of the intensity of the at least one measurement signal to the intensity of the reference signal.

Claim 34 (new): The method as recited in claim 27 wherein the evaluation unit assigns a quality signal to the at least one measurement signal.

Claim 35 (new): The method as recited in claim 34 wherein the quality signal is used for automatically determining a time for the next service fluid replacement.

Claim 36 (new): The method as recited in claim 27 wherein the machine is an engine of a vehicle.

Claim 37 (new): The method as recited in claim 27 wherein the service fluid is lubricating oil, engine oil or hydraulic oil.